

Name \_\_\_\_\_

## Study Guide: Arthropods and Annelids

*Note: Also study the labeled insect and earthworm diagrams.*

1. The name arthropod literally means \_\_\_\_\_, and the external feature that supports and protects an arthropod's body is its \_\_\_\_\_.
2. Centipedes belong to the class \_\_\_\_\_ and millipedes belong to the class \_\_\_\_\_.
3. An example of a crustacean would be a/an \_\_\_\_\_ and an example of an arachnid would be a/an \_\_\_\_\_.
4. The largest order of insects is the \_\_\_\_\_, but the largest insect that ever lived was the \_\_\_\_\_, an ancient dragonfly.
5. Name an insect that **HARMS** humans in some way (other than stinging, biting, or annoying) and one that **HELPS** humans, and EXPLAIN how.
6. Insects have \_\_\_\_\_ pairs of jointed legs and a three-part body that consists of a \_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.
7. The order Lepidoptera consists of \_\_\_\_\_ and means \_\_\_\_\_. The order Orthoptera consists of \_\_\_\_\_ and means \_\_\_\_\_.
8. The order Coleoptera consists of \_\_\_\_\_ and means \_\_\_\_\_. The order Odonota consists of \_\_\_\_\_ and means \_\_\_\_\_.
9. The order Diptera consists of \_\_\_\_\_ and means \_\_\_\_\_. The order Hymenoptera consists of \_\_\_\_\_ and means \_\_\_\_\_.

10. The change in form or structure of insects as they proceed through their life cycle is known as \_\_\_\_\_, and the pupal stage during which larval structures are broken down and adult structures are formed is known as a \_\_\_\_\_. The five larval stages of a cabbage white butterfly are also called \_\_\_\_\_.

11. Give the correct order for the life cycle of a cabbage white butterfly.

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12. A body plan with 2 similar halves has \_\_\_\_\_ symmetry. The “head” end of the organism is called the \_\_\_\_\_ end, and the “tail” end is called the \_\_\_\_\_ end.

13. In annelids, the \_\_\_\_\_ stores food, the \_\_\_\_\_ grinds food, and the \_\_\_\_\_ (part of excretory system) help to get rid of wastes.

14. Earthworms have \_\_\_\_\_ pairs of hearts. Their well developed nervous system includes a group of nerve cells called \_\_\_\_\_, which is also referred to as the brain.

15. Where do blackworms live? BE SPECIFIC

16. Explain how a blackworm moves. BE SPECIFIC

17. In earthworms, the \_\_\_\_\_ muscles contract to make the worm long and thin, while the \_\_\_\_\_ muscles contract to make the worm short and fat.

18. Tiny hairs on each segment of an earthworm that act like anchors to aid in movement are called \_\_\_\_\_. The bulge around an earthworm’s center that is used for reproductive purposes is the \_\_\_\_\_.

19. Explain 3 ways earthworms help the soil.

20. The scientific name of a blackworm is \_\_\_\_\_, and the scientific name of an earthworm is \_\_\_\_\_.